

# SEQUENCE LISTING

<110> ARAKAWA, TAKESHI  
KIKUKAWA, MASANAO  
SHIMABUKURO, ISAO  
TADANO, MASAYUKI  
MATSUMOTO, YASUNOBU  
TSUJI, NAOTOSHI  
SATO, YOSHIYA

<120> HETERO TYPE PENTAMER RECOMBINANT VACCINE

<130> 285137US0XPCT

<140> 10/565,595

<141> 2006-01-24

<150> PCT/JP04/10459

<151> 2004-07-23

<150> JP 2003-279156

<151> 2003-07-24

<150> JP 2003-412053

<151> 2003-12-10

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<170> PatentIn Ver. 3.3

<210> 1

<211> 293

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic  
polypeptide

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			20					25					30		

Tyr	His	Asn	Thr	Gln	Ile	His	Thr	Leu	Asn	Asp	Lys	Ile	Phe	Ser	Tyr
		35					40					45			

Thr	Glu	Ser	Leu	Ala	Gly	Lys	Arg	Glu	Met	Ala	Ile	Ile	Thr	Phe	Lys
	50					55					60				

Asn	Gly	Ala	Thr	Phe	Gln	Val	Glu	Val	Pro	Gly	Ser	Gln	His	Ile	Asp
65					70					75					80

Ser	Gln	Lys	Lys	Ala	Ile	Glu	Arg	Met	Lys	Asp	Thr	Leu	Arg	Ile	Ala
			85						90					95	

Tyr Leu Thr Glu Ala Lys Val Glu Lys Leu Cys Val Trp Asn Asn Lys  
 100 105 110  
 Thr Pro His Ala Ile Ala Ala Ile Ser Met Ala Asn Gly Pro Gly Pro  
 115 120 125  
 Glu Phe Thr Tyr Gly Met Cys Thr Glu Lys Phe Ser Phe Ala Lys Asn  
 130 135 140  
 Pro Ala Asp Thr Gly His Gly Thr Val Val Ile Glu Leu Ser Tyr Ser  
 145 150 155 160  
 Gly Ser Asp Gly Pro Cys Lys Ile Pro Ile Val Ser Val Ala Ser Leu  
 165 170 175  
 Asn Asp Met Thr Pro Val Gly Arg Leu Val Thr Val Asn Pro Phe Val  
 180 185 190  
 Ala Thr Ser Ser Ala Asn Ser Lys Val Leu Val Glu Met Glu Pro Pro  
 195 200 205  
 Phe Gly Asp Ser Tyr Ile Val Val Gly Arg Gly Asp Lys Gln Ile Asn  
 210 215 220  
 His His Trp His Lys Ala Gly Ser Thr Leu Gly Lys Ala Phe Ser Thr  
 225 230 235 240  
 Thr Leu Lys Gly Ala Gln Arg Leu Ala Ala Leu Gly Asp Thr Ala Trp  
 245 250 255  
 Asp Phe Gly Ser Ile Gly Gly Val Phe Asn Ser Ile Gly Lys Ala Val  
 260 265 270  
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 ctaaattgata agatatattc gtatacagaa tctctagctg gaaaaagaga gatggctatc 180  
 attactttta agaatggtgc aacttttcaa gtagaagtac caggtagtca acatatagat 240  
 tcacaaaaaa aagcgattga aaggatgaag gataccctga ggattgcata tcttactgaa 300  
 gctaaagtgc aaaagttatg tgtatggaat aataaaacgc ctcatgcgat tgccgcaatt 360

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agtatggcaa atggccccgg tccagaattc acctatggca tgtgcacaga aaaattctcc 420
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gggagtgatg gcccctgcaa aattccgatt gtctccgttg cgagcctcaa tgacatgacc 540
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gtgctggtcg agatggaacc ccccttcgga gactcctaca tcgtagttgg acggggagac 660
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actttgaagg gagctcagag actggcagcg ttgggtgaca cagcctggga ctttggctcc 780
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<213> Artificial Sequence

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<210> 4

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<213> Artificial Sequence

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<221> MOD\_RES

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 <223> see specification as filed for detailed description of  
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Xaa Xaa

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<210> 8  
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